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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,938	02/01/2002	Stephen J. Kovacic	115-01 US Div(2)	9218

25319 7590 09/10/2003

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EXAMINER

PHAM, THANH V

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,938

Applicant(s)

KOVACIC ET AL.

Examiner

Thanh V Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-16 and 22-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-16 and 22-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/28/03 has been entered.

Drawings

2. The *amended* drawings, figures 5-13, were received on March 31, 2003 (dated March 28, 2003, paper number 7). These drawings are acceptable.

Response to Amendment

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 10-16 and 22-29 are rejected under 35 U.S.C. 102(a) as being anticipated by Yamazaki U.S. Patent No. 5,955,745.

The Yamazaki reference disclose a device comprising: a silicon substrate 23 forming one of a collector and an emitter (fig. 8), the substrate being of a first conductivity type (col. 9, lines 24-35); a layer of SiGe 27 of a second conductivity type

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covering at least a portion of the silicon substrate; *a first layer of silicon 28 of the second conductivity type at least substantially supported by and covering a substantial portion of the SiGe layer*; a first layer of polysilicon 29 of the second conductivity type at least substantially supported by and covering a substantial portion of the *first layer of silicon* with the exception of a window region, *the first layer of silicon having its surface unaffected by a process of etching within the window region, the first layer of silicon forming a base terminal of the transistor*; and, a second layer of polysilicon of the first conductivity type *insulated from the first layer of polysilicon and contacting the unetched first layer of silicon within the window region*, said second layer of polysilicon forming the other of the collector and the emitter *terminals of the transistor*.

An insulating layer 30 separates the two layers of polysilicon.

Response to Arguments

5. Applicant's arguments, see page 8's second and third paragraphs and page 9's last paragraph, filed 08/28/03, *based upon the amendment*, with respect to the abstract; the specification and claims 30-32, have been fully considered and are persuasive. The related objection and rejection under 35 U.S.C. 112, second paragraph have been withdrawn.

6. Applicant's arguments filed 08/28/03 have been fully considered but they are not *all* persuasive.

7. The affidavit under 37 CFR 1.132 filed on March 31, 2003 (dated March 28, 2003, paper number 6) is insufficient to overcome the rejection of claims 10-16, 22-32

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based upon Yamazaki U.S. Patent No. 5,955,745 as set forth in the last Office action because:

Applicant has not established that the process of Yamazaki U.S. Patent No. 5,955,745 could not be performed to result in the second layer of polysilicon contacting the first layer of polysilicon as recited. The claims do not require exposing any particular portion of the window region and are therefore open to the result depicted in fig. F of the attachment to the affidavit under 37 CFR 1.132. Furthermore, the results depicted at fig. F are dependent on the size of the opening and conditions of etching. For sufficiently large opening and certain conditions of etching, the process of '745 produces a working device, as evidenced by the claims of the patent, which is encompassed by the instant claims. The instant device may be more clearly distinguished from the device of '745 using product-by-process language (MPEP 2113).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh V Pham whose telephone number is 703-308-2543. The examiner can normally be reached on M-T (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on 703-306-2794. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TvP
09/03/2003


George Fourson
Primary Examiner